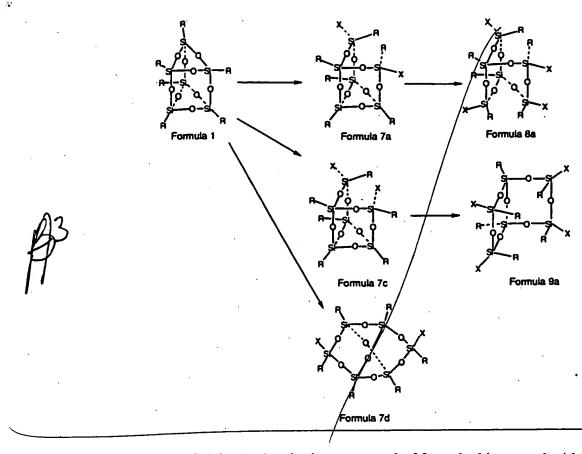
## IN THE CLAIMS

Amend or rewrite the following claims per the clean copy shown below as subsequently explained by a marked-up version attached as Exhibit A.

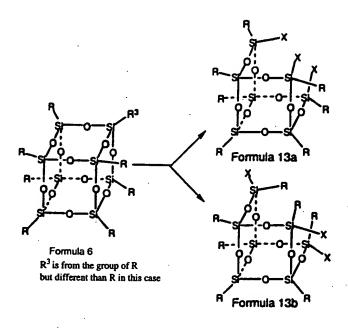
- A
- 3. A method for selectively opening the rings in POSS compounds to form functionalized POSS derivatives comprising, reacting  $[(RSiO_{1.5})_n]_{\Sigma^{\#}}$  with a strong acid to form  $[(RSiO_{1.5})_{n-m}(RXSiO_{1.0})_m]_{\Sigma^{\#}}$ , where n is 4-24, m is 1-10, # is m+n, R is selected from the group consisting of aliphatic, aromatic, olefinic, alkoxy, siloxy and H and X is the conjugate base of said acids, which base is F, OH, SH, NHR, NR<sub>2</sub>, C1O<sub>4</sub>, SO<sub>3</sub>CH<sub>3</sub>, SO<sub>3</sub>CF<sub>3</sub>, SO<sub>3</sub>OH, SO<sub>3</sub>Cl, SO<sub>3</sub>CH<sub>3</sub>, NO<sub>3</sub>, PO<sub>4</sub> or Cl.
- SUB CU/
- 5. A method for selectively opening the rings in POSS compounds to form functionalized POSS derivatives comprising, reacting  $[(RSiO_{1.5})_n]_{\Sigma^{\#}}$ ,  $[(RSiO_{1.5})_n(R^3SiO_{1.5})_m]_{\Sigma^{\#}}$  or  $[(RSiO_{1.5})_n(R^1R^2SiO_{1.0})_m]_{\Sigma^{\#}}$  with a strong acid to form said derivatives, where n is 6-12, m is 1-10, where  $R^1$ ,  $R^2$  and  $R^3$  are different substituents than R which are all selected from the group consisting of aliphatic, aromatic, olefinic, alkoxy, siloxy and H and where # is the sum of the lettered substituents in said POSS compound.
- SUB 12. The method of claim 3 wherein the compound of formula 1 is reacted with said acid to form a compound of the following formulas:



16. The method of claim 5 wherein the compound of formula 6 is reacted with said acid to form the compound selected from formulas 12a, b, or c as follows:



17. The method of claim 5 wherein the compound of formula 6 is reacted with said acid to form the compound selected from the group of formulas 13 a and b as follows:



PY

18. A polyhedral oligomeric silsesquioxane (POSS) compound of the formula,

5UB C37  $[(RSiO_{1.5})_n(RXSiO_{1.0})_m]_{\Sigma^\#}$ , where n is 4-24, m is 1-10, R is aliphatic, aromatic, olefinic, alkoxy, siloxy or H and X is the conjugate base of an acid, which base is of F, OH when said compound has at least three open rings, SH, NHR or NR<sub>2</sub>, C1O<sub>4</sub>, SO<sub>3</sub>OH, SO<sub>3</sub>CF<sub>3</sub>, SO<sub>3</sub>Cl, SO<sub>3</sub>CH<sub>3</sub>, NO<sub>3</sub>, or PO<sub>4</sub>

515 NY 20. (Amended) A method for expanding rings in polyhedral oligomeric silsesquioxane (POSS) compounds comprising, reacting  $[(RSiO_{1.5})_n (R(HO)SiO_{1.0})_m]_{\Sigma^{\#}}$  with  $Y_2SiR^1R^2$  silane reagents to obtain at least one expanded POSS ring in  $[(RSiO_{1.5})_{n+m} (R^1R^2SiO_{1.0})_j]_{\Sigma^{\#}}$ , where R, R<sup>1</sup> and R<sup>2</sup> are aliphatic, aromatic, olefinic, alkoxy, siloxy or H, Y. is halide or amine, n is 4 –24, m is 1-2 and j is 1-10.

Add the following claims: